

General Assembly

Raised Bill No. 323

February Session, 2012

LCO No. 1395

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Referred to Committee on Public Safety and Security

Introduced by: (PS)

AN ACT CONCERNING CRANE OPERATIONS.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

- Section 1. Section 29-221 of the general statutes is repealed and the
- 2 following is substituted in lieu thereof (*Effective October 1, 2012*):
- 3 As used in this chapter and sections 2 and 9 of this act: (1) "Board"
- 4 means the Examining Board for Crane Operators established under
- 5 section 29-222, as amended by this act; (2) "commissioner" means the
- 6 Commissioner of Construction Services; (3) "crane" means [(A) a tower
- 7 crane used in construction, demolition or excavation work, (B) a
- 8 hydraulic crane, (C) a power-operated derrick, or (D) a mobile crane
- 9 which is a mobile, carrier-mounted, power-operated hoisting machine
- 10 utilizing a power-operated boom which moves laterally by rotation of
- 11 the machine on the carrier and which has a manufacturers' maximum
- 12 rated capacity exceeding five tons power-operated equipment that can
- 13 hoist, lower and horizontally move a suspended load and which has a
- 14 manufacturers' maximum rated hoisting or lifting capacity exceeding
- 15 two thousand pounds, including, but not limited to: (A) Articulating
- 16 cranes such as knuckle-boom cranes, (B) crawler cranes, (C) floating

17 cranes, (D) cranes on barges, (E) locomotive cranes, (F) mobile cranes 18 such as wheel-mounted, rough terrain, all-terrain, commercial truck-19 mounted and boom truck cranes, (G) multi-purpose machines when configured to hoist and lower, by means of a winch or hook, and 20 21 horizontally move a suspended load, (H) industrial cranes such as 22 carry-deck cranes, (I) dedicated pile drivers when used in construction, 23 demolition or excavation work, (J) service or mechanic trucks with a 24 hoisting device, (K) a crane on a monorail, (L) tower cranes such as 25 fixed jib hammerhead boom, luffing boom and self-erecting, (M) 26 pedestal cranes, (N) portal cranes, (O) overhead and gantry cranes, (P) 27 straddle cranes, (Q) side boom cranes, (R) derricks, and (S) variations 28 of such equipment; (4) "hoisting equipment", other than cranes, means 29 motorized equipment (A) used in construction, demolition or 30 excavation work, (B) at a construction site for a project, other than a 31 project involving residential structures of less than four stories, the 32 estimated cost of which is more than one million two hundred fifty 33 thousand dollars, and (C) which has a manufacturer's rated hoisting or 34 lifting capacity exceeding five tons and a manufacturer's rated 35 maximum reach in excess of thirty-two feet; (5) "department" means 36 the Department of Construction Services; and (6) "apprentice" means 37 lanyone registered with the board for the purpose of learning crane operation or hoisting equipment operation any person who is not 38 39 licensed under this chapter and whose employer has registered him or 40 her with the board to learn crane operations or hoisting equipment operations under the direct supervision of a licensed operator in 41 42 accordance with section 9 of this act.

Sec. 2. (NEW) (Effective October 1, 2012) (a) Notwithstanding subdivisions (3) and (4) of section 29-221 of the general statutes, as amended by this act, the following items are excluded from the scope of chapter 539 of the general statutes: (1) Automotive wreckers and tow trucks when used to clear wrecks and haul vehicles, (2) digger derricks when used for augering holes for poles carrying electric and telecommunication lines, placing and removing the poles and handling associated materials to be installed on or removed from the poles, (3)

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machinery originally designed as vehicle-mounted aerial devices for lifting personnel and self-propelled elevating work platforms, (4) telescopic or hydraulic gantry systems, (5) stacker cranes, (6) powered industrial forklifts, except when configured to hoist and lower, by means of a winch or hook, and horizontally move a suspended load, (7) mechanic's truck with a hoisting device when used in activities related to equipment maintenance and repair, (8) machinery that hoists by using a come-a-long or chain fall, (9) gin poles when used for the erection of communication towers, (10) anchor handling or dredge-related operations with a vessel or barge using an affixed A-frame, (11) roustabouts, and (12) helicopter cranes.

- (b) Articulating or knuckle-boom truck cranes that deliver material to a construction site are excluded from the scope of chapter 539 of the general statutes when used to (1) transfer materials from the truck crane to the ground without arranging the materials in a particular sequence for hoisting, or (2) transfer building supply sheet goods or building supply packaged materials including, but not limited to, sheets of sheetrock, sheets of plywood, bags of cement, sheets or packages of roofing shingles and rolls of roofing felt from the truck crane onto a structure, using a fork or cradle at the end of the boom, but only when the truck crane is equipped with a properly functioning automatic overload prevention device.
- (c) The exclusion set forth in subsection (b) of this section does not apply when (1) the articulating or knuckle-boom crane is used to hold, support or stabilize the material to facilitate a construction activity, such as holding material in place while it is attached to the structure, (2) the material being handled by the articulating or knuckle-boom crane is a prefabricated component including, but not limited to, precast concrete members or panels, roof trusses, prefabricated building sections such as floor panels, wall panels, roof panels, roof structures or similar items, (3) the material being handled by the crane is a structural steel member such as joists, beams, columns and steel decking or a component of a systems-engineered metal building, or (4)

the activity is not otherwise excluded under subsection (b) of this section.

- Sec. 3. Section 29-222 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2012*):
- 88 There shall be in the Department of Construction Services an 89 Examining Board for Crane Operators consisting of five members who 90 shall be residents of this state. Members shall be appointed by the 91 Governor subject to the provisions of section 4-9a. One member shall 92 be an employee of the department, one member shall be a crane 93 operator having at least ten years of experience, one member shall 94 represent the interests of crane owners and two members shall be 95 public members. Members shall not be compensated for their services 96 but shall be reimbursed for necessary expenses in the performance of 97 their duties. A quorum of the board for the purpose of transacting 98 business shall exist only when there is present, in person, a majority of 99 its membership. Any member absent from (1) three consecutive 100 meetings of the board, or (2) fifty per cent of such meetings during any 101 calendar year shall be deemed to have resigned from the board.
- Sec. 4. Section 29-223 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2012*):
 - (a) The board shall keep a record of its proceedings and a roster of persons licensed or registered by it. The commissioner shall, with the advice and assistance of the board, adopt regulations, in accordance with chapter 54, for crane operators and hoisting equipment operators, specifying qualifications for applicants for licensure, requirements for examinations, procedures for issuance and renewal of licenses and certificates of registration and examination and application fees sufficient to meet the costs of administration of this chapter. The board shall administer and establish passing grades for licensure examinations. The board shall hold examinations at times and locations determined by the board and shall give written notice to applicants for examination of the time and place of examinations.

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- 116 [Examinations may be written or practical or both.] An applicant for a
- 117 license shall be required to take both a written and practical
- 118 examination.
- 119 (b) The written examination shall determine whether the applicant
- 120 (1) knows the information necessary for the safe operation of the
- 121 specific type of crane or hoisting equipment that the applicant will
- operate including (A) the controls and operational or performance 122
- 123 characteristics, (B) use of, and the ability to calculate, manually or with
- 124 a calculator, load or capacity information on a variety of configurations
- 125 of the equipment, (C) procedures for preventing and responding to
- 126 power line contact, (D) technical knowledge applicable to the specific
- 127 type of equipment the individual will operate concerning (i) site
- 128 information, (ii) operations, and (iii) load information, and (E)
- 129 technical knowledge applicable to site suitability, site hazards and site
- 130 access, and (2) is able to read and locate relevant information in the
- equipment manual and other materials containing information 131
- 132 referred to in subdivision (1) of this subsection.
- 133 (c) The practical examination shall determine whether the applicant
- 134 has the skills necessary for safe operation of the crane or hoisting
- 135 equipment including (1) the ability to recognize, from visual and
- 136 auditory observation, all items required in a shift inspection, (2)
- operational and maneuvering skills, (3) application of load chart 137
- information, and (4) application of safe shutdown and securing 138
- 139 procedures.
- 140 (d) Any license, or renewal thereof, issued pursuant to this section
- 141 shall be valid for a period of two years from the date of issuance. Every
- 142 four years the licensee shall take and pass, prior to the issuance of a
- 143 license renewal, an examination developed by the board that is
- designed to ensure that the licensee continues to meet the technical 144
- 145 knowledge and skills requirements set forth in subsections (b) and (c)
- 146 of this section.
- [(b)] (e) The board shall adopt regulations, in accordance with the 147

provisions of chapter 54, establishing a safety code for the operation and maintenance of cranes and hoisting equipment.

- Sec. 5. Section 29-223a of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2012*):
- 152 (a) No person shall engage in, practice or offer to perform the work 153 of a hoisting equipment operator, except as provided in subsection (b) 154 [or (c)] of this section, who is not the holder of a valid crane operator's 155 license or hoisting equipment operator's license issued by the board. 156 Each licensed hoisting equipment operator shall carry his or her license 157 on his or her person when operating hoisting equipment. No person 158 may engage in, practice or perform the work of a hoisting equipment 159 operator apprentice unless he or she has obtained a certificate of 160 registration from the board. An apprentice's certificate may be issued 161 for the performance of work of a hoisting equipment operator for the 162 purpose of training, [which] provided such work may be performed 163 only under the direct supervision of a licensed hoisting equipment 164 operator and is in compliance with the provisions of section 9 of this 165 act.
 - (b) The provisions of this section shall not apply to: (1) [Any person engaged in the occupation of hoisting equipment operator in the state on October 1, 2003, provided such person shall be required to obtain a license not later than one year of October 1, 2004, (2) engineers] Engineers under the jurisdiction of the United States, [(3)] (2) engineers or operators employed by public utilities or industrial manufacturing plants, [(4)] (3) any person operating either a bucket truck or a digger derrick designed and used for an electrical generation, electrical transmission, electrical distribution, electrical catenary or electrical signalization project, if such person: (A) Holds a valid limited electrical line contractor or journeyman's license issued pursuant to chapter 393 or any regulation adopted pursuant to said chapter, or (B) has engaged in the installation of electrical line work for more than one thousand hours, or (C) has enrolled in or has graduated from a federally

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- recognized electrical apprenticeship program, [or (5)] (4) persons
- engaged in boating, fishing, agriculture or arboriculture, or (5) persons
- engaged in activities, or using equipment, excluded under section 2 of
- this act.

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- [(c) On or after October 1, 2003, but not later than October 1, 2005, the board shall issue a license for a hoisting equipment operator to any person who provides a notarized statement from the person's employer indicating the dates and duties of employment operating such equipment or proof of ownership and control of a company utilizing such equipment.]
- Sec. 6. Section 29-224 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2012*):
 - (a) No person shall engage in, practice or offer to perform the work of a crane operator, except as provided in subsection (b) of this section, who is not the holder of a valid license issued by the board. Each licensed crane operator shall carry his or her license on his or her person when operating a crane. No person may engage in, practice or perform the work of a crane operator apprentice unless he or she has obtained a certificate of registration from the board. An apprentice's certificate may be issued for the performance of work of a crane operator for the purpose of training, [which] provided such work may be performed only under the direct supervision of a licensed crane operator and is in compliance with the provisions of section 9 of this act. No crane owner may operate or permit the operation of any of his or her cranes in this state unless he or she has obtained a certificate of registration from the board. Nothing in this subsection shall be construed to require a hoisting equipment owner to obtain a certificate of registration from the board.
- (b) The provisions of subsection (a) of this section shall not apply to:
 (1) [Any person engaged in the occupation of crane operator in the
 state on October 1, 1981, provided such person shall be required to
 obtain a license within one year of October 1, 1981, (2) engineers]

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- 226 Sec. 7. Section 29-224a of the general statutes is repealed and the 227 following is substituted in lieu thereof (*Effective October 1, 2012*):
- 228 Each crane or hoisting equipment owner or operator shall 229 immediately report any accident involving a crane or hoisting 230 equipment he or she owns or operates to the board. Upon receipt of 231 any such report, the board may cause a full investigation and 232 inspection of such crane or hoisting equipment to determine the cause 233 of the accident and may take any action it deems appropriate if, after 234 notice and opportunity for hearing, it determines that a violation of 235 any provision of this chapter or any regulations adopted thereunder 236 exists.
- 237 Sec. 8. Section 29-224b of the general statutes is repealed and the 238 following is substituted in lieu thereof (*Effective October 1, 2012*):
- 239 The commissioner or any employee of the Department of 240 Construction Services, while engaged in the performance of his or her 241 duties, may enter at all reasonable hours into and upon any premises 242 in or on which a crane or hoisting equipment is located for the purpose 243 of carrying out the provisions of this chapter and the regulations

244 adopted thereunder.

- Sec. 9. (NEW) (*Effective October 1, 2012*) (a) An apprentice is permitted to operate a crane or hoisting equipment only where the
- 247 requirements of this section are met.
- (b) The employer shall provide each apprentice with sufficient training prior to operating the equipment to enable the apprentice to operate the equipment safely under the limitations established by this section, including continuous monitoring, and any additional limitations established by the employer.
- (c) The tasks performed by the apprentice while operating the equipment must be within the apprentice's ability.
 - (d) While operating the equipment, the apprentice must be continuously monitored by an individual who: (1) Is employed by, or is an agent of, the apprentice's employer, (2) holds a valid crane operator's or hoisting equipment license issued under chapter 539 of the general statutes, (3) while monitoring the apprentice, performs no tasks that detract from such individual's ability to monitor the apprentice, (4) for equipment other than tower cranes, is in direct line of sight of the apprentice and communicates orally or by hand signals with the apprentice, and (5) for tower cranes, is in direct communication with the apprentice.
 - (e) The individual monitoring the apprentice may take short breaks provided (1) the break lasts no more than fifteen minutes and there is no more than one break per hour, (2) prior to the break, the individual informs the apprentice of the specific tasks the apprentice is to perform and limitations to which the apprentice must adhere, and (3) the specific tasks are within the apprentice's abilities.
- (f) An apprentice shall not operate equipment in any of the following circumstances: (1) If any part of the equipment, load line or load, including rigging and lifting accessories, if operated up to the

- 274 equipment's maximum working radius, could get within twenty feet of 275 a power line that is three hundred fifty kilovolts or less or within fifty 276 feet of a power line that is over three hundred fifty kilovolts, (2) if the 277 equipment is used to hoist personnel, (3) in multiple equipment lifts, 278 (4) if the equipment is used over a shaft or cofferdam or in a tank farm, 279 and (5) in multiple-lift rigging operations, except where the individual 280 monitoring the apprentice determines that the apprentice's skills are 281 sufficient.
- Sec. 10. Section 29-225 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective October 1, 2012*):
 - (a) The board may suspend or revoke a crane operator's license, a hoisting equipment operator's license or an apprentice's certificate after notice and hearing upon a finding that the holder has demonstrated incompetence or has been guilty of negligence in the performance of his or her work.
 - (b) The board may suspend or revoke a crane owner's registration after notice and hearing upon a finding that the holder has failed to properly maintain his <u>or her</u> crane or has permitted the operation of his or her crane in an unsafe manner.
 - (c) The board may impose a civil penalty of not more than [one] three thousand dollars on any crane or hoisting equipment owner or operator who violates any provision of this chapter or any regulations adopted thereunder.
 - (d) The board shall not renew a license or registration of any crane or hoisting equipment owner or operator who has an unpaid civil penalty until such time as such penalty is paid in full.

This act shall take effect as follows and shall amend the following				
sections:				
Section 1	October 1, 2012	29-221		
Sec. 2	October 1, 2012	New section		

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Sec. 3	October 1, 2012	29-222
Sec. 4	October 1, 2012	29-223
Sec. 5	October 1, 2012	29-223a
Sec. 6	October 1, 2012	29-224
Sec. 7	October 1, 2012	29-224a
Sec. 8	October 1, 2012	29-224b
Sec. 9	October 1, 2012	New section
Sec. 10	October 1, 2012	29-225

Statement of Purpose:

To revise license and certification requirements for crane and hoisting equipment operators.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]